

### **ABSTRACT OF THE DISCLOSURE**

Methods and apparatus are provided for subjecting an original, pixel domain image to an Integer Wavelet Transform (IWT) to obtain a matrix of wavelet coefficients; selecting at least one bit plane between a least significant bit plane and a most significant bit plane of the matrix of wavelet coefficients; compressing the at least one selected bit plane to produce free space in the at least one selected bit plane; embedding hidden data in the free space of the at least one compressed bit plane; and subjecting the at least one embedded bit plane to an Inverse IWT to produce a marked pixel domain image. Methods and apparatus are also provided for reversing this process.

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